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# 4-H Community ATV Safety Program



Evaluation Research  
Progress Report

1990 - 1993

United States  
Department of  
Agriculture



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## NOTE

The 4-H Youth Development Program supports the position of the U.S. Consumer Product Safety Commission and the ATV industry that young people under the age of 16 years should not operate adult-size ATVs.

The current reality in the U.S. is that many youth under the age of 16 years already are operating and will continue to operate adult-size ATVs on a regular basis.

Youth working in the agricultural community are particularly at risk because these vehicles are a normal part of that environment. They are learning at a young age to use a variety of complex farm equipment and need help to establish the attitudes necessary to operate equipment safely.

As youth educators and youth advocates, we have chosen to deal with that reality and focus the attention of this program on increasing the practice of safe behaviors and attitudes among those youth who already operate ATVs.

We do not intend to attract new riders to ATVs, but want to provide safety recommendations to those who already ride.

Additional emphasis is being placed on helping adults make informed decisions about whether young people in their care should operate a particular ATV at all.



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## ACKNOWLEDGMENTS

The 4-H Community ATV Safety Program is a collaborative effort of many public agencies, community organizations and private businesses. Our appreciation and deep gratitude is extended to the many individuals and organizations who have entered this partnership to address a common concern - the safety and well-being of youth. Those involved in this program nationwide include:

American Honda Motor Co., Inc. and its independent, local dealers  
American Farm Bureau Federation and representatives of its state affiliates  
ATV Safety Institute  
Bureau of Land Management, U.S. Department of the Interior  
Foundation for Off-Road Vehicle Safety  
4-H volunteer leader associations  
National 4-H Council  
National Safety Council  
Forest Service, U.S. Department of Agriculture  
Cooperative Extension System, U.S. Department of Agriculture  
and its state and county programs

In addition to these specific organizations, support has been provided by various state public health departments; Native American health organizations; wildlife, fish and game agencies; emergency medical organizations; law enforcement agencies and other agencies and organizations.

### The Research Team:

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## I. INTRODUCTION

The design process for the 4-H Community ATV Safety Program was initiated in August of 1989. A team of eighteen people, including both youth and adults, was convened to address the question: "What can we do to reduce the number of ATV-related injuries and fatalities among youth?" The programmatic answers evolved through several days of discussion and many months of work by members of a Design Team which represented youth, safety, consumer, industry, government, and education.

This report provides complete analysis of the first phase of the 4-H Community ATV Safety Program (May 1990 - July 1992), interim information on the ongoing second phase (August 1992 - July 1993), and describes the third phase. In addition, some discussion is provided relative to possible areas of future research.

The report is divided into two main sections which cover first, the historical context and development of the safety program and the research evaluation plan and second, the evaluation of the program itself (specifically focused on Phases I and II). The information and discussion in the body of the report is written in concise form for the reader who is interested in learning the "basics," with notes and appendices providing further explanation.



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## II. BACKGROUND TO THE EVALUATION

### INTRODUCTION

The purpose of the 4-H Community ATV Safety Program is to change behavior of young people in four categories which have been determined to increase their risk of ATV-related injuries and fatalities. These risk factors include: 1) use of helmets; 2) carrying passengers; 3) riding on pavement; and 4) riding on or alongside of the road. Since the program began in 1990, 34 State Teams have reached 443,087 youth and 538,964 adults through personal contact during a workshop, staffed exhibit, ATV rider course or camping program.

The 4-H Community ATV Safety Program began in 1981 when a local Extension 4-H Agent recognized that “we” should do something to reduce the injuries and fatalities among youth who ride all-terrain vehicles. Six months of research into the situation revealed that 1) ATV injuries and fatalities were indeed a widespread and growing problem, and that 2) there was no organization with curriculum or programs available to address the problem.

In response to this problem, a classic partnership was formed including concerned citizens, public health officials, educators, and representatives from private enterprise. In 1989, National 4-H Council and American Honda Motor Corp., Inc., with support provided by the U.S. Consumer Product Safety Commission, began a collaborative effort to develop a strategy to promote ATV safety. Each of these groups had a specific agenda as it related to the problem, but they shared a common concern for youth. From these initial partnerships, a national program design team evolved which included youth and adult volunteers as well as representatives from a number of diverse organizations.

### THE WORKSHOPS

In March and April 1990, teams from 37 states gathered at four regional workshops. These workshops helped develop a nationwide network of state teams. Participants realized that no one person or organization could solve the youth-related ATV safety problems alone. Team members represented community organizations, public agencies and business interests. Together, they prepared statewide and local ATV safety action plans to address the issue of all-terrain vehicle safety as it affects young people.

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During the regional workshops, team members focused on teaching techniques, stages of youth development and community action strategies as a part of their overall training. They practiced safety and riding skills, along with learning about ATVs and kids as a public policy issue. They also addressed ATV safety as it relates to the 4-H mission and the teaching of life skills.

The ATV Safety Institute provided a full four-day course in order that one team member from each state might become a licensed ATV instructor for the ATV Rider Course. Twenty-eight team members were licensed as instructors while sixty-two workshop participants completed the ATV Rider Course.

## THE STATE ACTION PLANS

During the workshops the state teams each developed an action plan to implement in their individual states. Examples of kinds of educational activities, based on tested 4-H educational strategies, were provided but the teams were encouraged to draft approaches which fit their local needs. The resulting plans, therefore, tended to draw from a common basis of education and suggested activities, but were unique in their overall design.

### **34 State Teams Have Reached:**

- 443,087 Youth
- 538,964 Adults
- **982,051 Total**

## Program Strategies

Strategy	# Youth	# Adults
Hands-On (4-6 Hrs)	738	510
Workshops (1-3 Hrs)	51,626	7,899
Train-the-Trainer	341	486
Staffed Exhibits	378,550	529,550
Camp Workshops	11,832	989

## Media Contacts

	# Events	Estimated Audience
Television	57	15,726,300
Radio	257	13,257,710
Newspapers Magazines	528	10,002,379
Total Contacts		38,986,389

## RESEARCH EVALUATION PLAN

ATV safety risk factors identified by the U.S. Consumer Product Safety Commission were selected as impact indicators. They include frequency of: helmet use, riding on pavement, carrying passengers and riding alongside the road. Instruments to measure behavior change in terms of these risk factors were developed by 4-H with expert input from staff of the U.S. Consumer Product Safety Commission and university evaluation specialists. These instruments include a "registration form," phone interview format and mail questionnaires (Appendix B).



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### III. PHASES OF THE RESEARCH EVALUATION

#### INTRODUCTION

The evaluation of the State Action Plans has evolved through three phases. Data collection and analysis have been completed for Phase I, which comprises the central focus of this report. Data collection is complete for Phase II with analysis ongoing, while data collection has just begun for Phase III. The salient characteristics of each phase are outlined below.

#### PHASE I

1. Base data were collected via a "Registration Form" completed by participants prior to participation in ATV safety program activities;
2. Mail surveys were conducted with youth participants four to five months post-program; and
3. Phone interviews were conducted with as many participants as possible starting in the sixth month after program participation.

#### PHASE II

1. Base data are collected via a "Registration Form" completed by participants prior to participation in ATV safety program activities;
2. INTERVENTION: Parent or other adults responsible for these youth receive a letter and brochure explaining the program and the major risk factors as soon as registration forms are received by the national office;
3. Mail surveys are conducted with adults responsible for youth participants four months post-program; and
4. Phone interviews are conducted with as many youth participants as possible starting in the sixth month after program participation.

#### PHASE III

1. Base data are collected via a "Registration Form" completed by participants prior to the program involvement;

- 
2. One-half of the parent or other adults responsible for these youth receive a letter and brochure as soon as registration forms are received by national office;
  3. Mail surveys are conducted with a randomly selected group of parents or other adults responsible for youth participants four months post-program; and
  4. Phone interviews are conducted with as many participants as possible starting in the sixth month after program participation.

## RESEARCH DESIGN

The major research question for the first phase was "Do the state action plans have a significant impact on ATV safety-related behaviors?" In order to answer this question, data on risk behavior were collected prior to participation in a program, via a registration form, and after participation via both a mail questionnaire and phone interview as listed above.

Two other categories of data collected include (1) demographic data (such as participant age) and various non-risk behavior data (such as length of experience riding ATV's), obtained via the initial registration form, and (2) attitudinal data, collected via the mailed questionnaires and phone interviews. The demographic and behavioral-related data allowed the risk behavior data to be analyzed in terms of various pertinent variables. The attitudinal data provided information for possible program development and future research.

The Phase I report reflects the data collected as of March 1993. Data include participants from a total of 45 states because of workshops conducted at the National 4-H Center as part of the Citizenship Washington Focus program during the summers of 1990-1992.

## DATA ANALYSIS

The purpose of this analysis is to determine: 1) if the difference in the mean scores on the risk factors is in the anticipated direction, and 2) if the difference is statistically significant. The statistical significance of the difference in the mean scores indicates the risk of claiming a difference when there is none. So, for example, if the difference in the mean scores for youth ages 5-11 years wearing helmets before and after the program were in the anticipated direction and statistically significant at the .05 level (which they were), then the risk of being wrong in claiming a difference would be five out of 100 times.

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Consequently, the smaller the significance level, the “stronger” the claims about the program. (See Appendix A, “Evaluation Analysis Notes”, at the end of this report.)

Because we can match pre- and post-program data from the same individuals, a dependent t-test was selected as an analysis technique. In the analysis, pre- and post-program scores for youth (ages 5-20 years) were examined for the four critical risk factors (i.e., wearing a helmet, carrying passengers, riding on pavement, and riding on or alongside of the road) by five variables: 1) age of the respondents; 2) how often the respondents ride; 3) riding experience; 4) type of learning experience; and 5) duration of learning experience. Pre-program data were taken from the Registration Forms submitted following workshops or other learning experiences conducted within the states. Post-program data were taken from the telephone survey conducted six months or more following participation in the program.

The demographic and non-risk behavior data were analyzed using simple descriptive statistics (frequency, mean, median and mode). The attitudinal data were analyzed using simple frequencies with the open-ended questions being coded prior to analysis.



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## IV. PHASE I RESEARCH EVALUATION

### SUMMARY OF RISK BEHAVIOR DATA

Analysis of the data from the first program evaluation phase (Summer 1990 - March 1993) indicate that youth participating in the program are changing their behavior in ways that will minimize their risk as they continue to operate ATVs. All categories of risk behavior for the group as a whole showed significant change in the expected direction. In other words, youth who participated in the program wear helmets more often. They indicate that they ride on pavement, carry passengers and ride alongside roads less often. In addition, changes in behavior were significant in terms of most of the categories used. Key findings include:

In the relationship between the age of participants and the risk factors contributing to ATV-related injuries and fatalities, the key information to note is the positive behavior change with the target audience of youth age 12-16 years. The data are statistically significant on all four risk factors for youth in that age range as well as for all four risk factors in the 9-11 age group.

T-test analysis of the RISK FACTORS and the LENGTH of the LEARNING EXPERIENCE in which a youth was involved indicates that behavioral change is most likely to occur as a result of participation in either sessions of 1 hour or less or 1-3 hour sessions. Data show statistical significance at the  $p < .000$  level on ALL RISK FACTORS for those two categories.

### SPECIFIC RESULTS

At each data collection point, four questions were asked with identical wording:

How often do you wear a helmet when you ride an ATV?

How often do you carry a passenger when operating an ATV?

How often do you operate your ATV on pavement other than simply crossing a walk or drive?

How often do you operate your ATV on or alongside the road?

Possible responses for each question were: "Always," "Usually," "Sometimes," or "Never."

Using a paired t-test, responses from the base data and those from phone interviews were compared. All four of the risk factors show statistical significance at the  $p < .001$  level. The actual data are shown below. These data indicate that the program is making a positive difference in the behavior of youth. More importantly, that difference is related to the major ATV-related risk factors. Results of t-tests in terms of specific categories are shown below.

**Have You Made Any Changes in Your Use of ATV's  
As A Result of Participating in the  
4-H Community ATV Safety Program?**

**70.6% Responded "YES"!**

The Most Common Examples of Change Were:

- More Careful/Drive More Slowly
- Wear More Protective Gear
- Wear Helmet More Often

Mail Survey: N=650 Youth; Response Rate = 17%

**Behavior Related to Risk Factors**

	No. Cases	Paired T-test Significance
<b>Helmet Use</b>		
Base Data	1233	.000
Phone Interview	1233	
<b>Passengers</b>		
Base Data	1222	.000
Phone Interview	1222	
<b>Pavement</b>		
Base Data	1207	.000
Phone Interview	1207	
<b>Riding on Road</b>		
Base Data	1071	.000
Phone Interview	1071	

## AGE AND RISK FACTORS

Applying the paired t-test to each of the four risk factors by selected age categories indicates statistical significance at the  $p < .00$  level for youth in the 12-16 year age range. The data also show statistical significance for all categories within the 5-11 year age range. In the 17-20 year age range, the significance levels vary widely, possibly because of the smaller number of cases.

In the relationship between the age of participants and the risk factors contributing to ATV-related injuries and fatalities, the key information to note is the positive behavior change with the target audience of youth age 12-16 years. The data indicate statistical significance on all four risk factors for youth in that age range, as well as for youth under 11 years of age.

### Age and Risk Factors

	Helmet Sig. (N)	Passengers Sig. (N)	Pavement Sig. (N)	Road Sig. (N)
5-11 years	.000* (388)	.003* (382)	.000* (371)	.000* (344)
12-16 years	.000* (780)	.000* (776)	.000* (771)	.000* (664)
17-20 years	.766 (66)	.038* (65)	.038* (66)	.255 (64)

\* Significant, change in appropriate direction (i.e., toward safer behavior).

## RIDING FREQUENCY AND RISK FACTORS

The data indicate behavior change at the  $p < .05$  level for all categories.

### Riding Frequency and Risk Factors

	Helmet Sig. (N)	Passengers Sig. (N)	Pavement Sig. (N)	Road Sig. (N)
Daily	.000* (367)	.000* (367)	.000* (366)	.000* (322)
Weekly	.000* (383)	.000* (382)	.000* (378)	.000* (328)
Monthly	.010* (195)	.000* (193)	.000* (189)	.000* (170)
Several/Year	.000* (251)	.000* (248)	.000* (245)	.000* (221)

\* Significant, change in appropriate direction (i.e., toward safer behavior).

## RIDING EXPERIENCE AND RISK FACTORS

The data indicate behavior change at the  $p < .05$  level for all categories.

### Riding Experience and Risk Factors

	Helmet Sig. (N)	Passengers Sig. (N)	Pavement Sig. (N)	Road Sig. (N)
< 1 year	.000* (142)	.001* (141)	.000* (135)	.014* (125)
1-3 years	.000* (293)	.000* (290)	.000* (288)	.000* (250)
3-5 years	.000* (272)	.000* (270)	.000* (271)	.000* (226)
> 5 years	.000* (225)	.000* (225)	.000* (226)	.000* (210)

\* Significant, change in appropriate direction (i.e., toward safer behavior).

## METHODOLOGY AND RISK FACTORS

The data indicate behavior change at the  $p < .05$  level for all categories.

### Methodology and Risk Factors

	Helmet Sig. (N)	Passengers Sig. (N)	Pavement Sig. (N)	Road Sig. (N)
Mixed/No Riding	.000* (782)	.000* (775)	.000* (761)	.000* (657)
No Media or Riding	.001* (158)	.000* (156)	.000* (158)	.000* (152)
ATV Demo or Riding	.000* (253)	.000* (251)	.000* (249)	.000* (224)

\* Significant, change in appropriate direction (i.e., toward safer behavior).

## LENGTH OF LEARNING EXPERIENCE AND RISK FACTORS

The data indicate behavior change at the  $p < .05$  level for all categories except in the data cell of learning experience  $>3$  hrs. and helmet use.

### Length of Learning Experience and Risk Factors

	Helmet Sig. (N)	Passengers Sig. (N)	Pavement Sig. (N)	Road Sig. (N)
<1 hour	.000* (351)	.000* (347)	.000* (336)	.000* (318)
1-3 hours	.000* (767)	.000* (760)	.000* (757)	.000* (655)
>3 hours	.218 (87)	.000* (87)	.000* (86)	.046* (71)

\* Significant, change in appropriate direction (i.e., toward safer behavior).

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## RIDING VS. NON-RIDING TRAINING

A comparison of particular interest is the behavior change experienced by participants involved in “hands-on” training, i.e., actually riding ATVs vs. the behavior change of those involved in non-riding training experiences. The results indicate that there is no significant difference between the groups. In other words, hands-on training and non-hands-on training have the same effectiveness in producing behavior change relative to the four risk factors. This is a somewhat surprising finding as it was expected that hands-on training would prove to be more effective.

### ATV/RIDER “FIT”

According to the U.S. Consumer Product Safety Commission, many youth are riding ATVs of an engine size too large for them to operate safely. Early in the development of the 4-H Community ATV Safety Program, we agreed to emphasize the need to “fit” the ATV to the rider. “Fit guidelines,” provided by the U.S. CPSC and offered to the state teams in quantity copies of a brochure entitled “Safety Tips for the ATV Rider,” were developed in 1990 to support this educational effort.

Two open-ended questions asked in the follow-up mail survey of participants offer an opportunity for program participants to comment on the importance of ATV/rider “fit” as a risk factor. In replying to the question, “How can you decide if someone under 16 years old can operate a specific ATV safely?”, 31.5% of the youth responding indicated ATV/rider “fit” as the main factor. When questioned about the main risks for youth under 16 years who ride ATVs, 32.4% of the youth said “recklessness or showing off” and 18.6% said “poor ATV/rider “fit.” (Mail survey: N=786 youth; Response Rate = 17%)

## PHASE I DESCRIPTIVE DATA

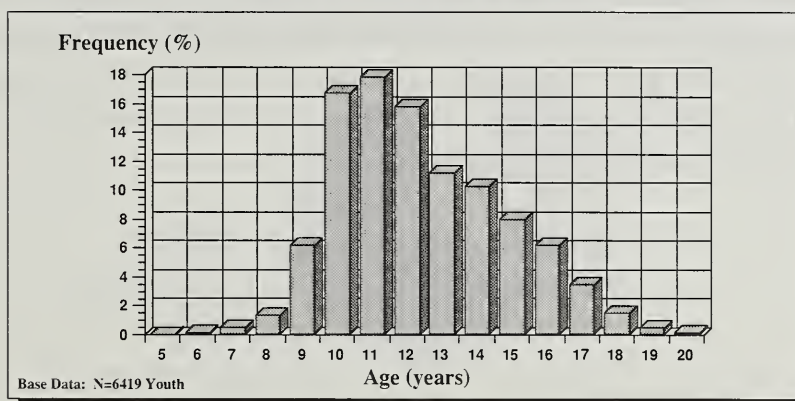
### AGE AND EXPERIENCE

The target audience of this program is youth under 16 years of age who are already riding ATVs. Of the first 6419 cases in our sample population, the ages are:

Less than 12 years	=	2754 youth	=	42.9%
12-16 years	=	3306 youth	=	51.5%
Greater than 16 years	=	359 youth	=	5.6%

## Community ATV Safety Program

### Age of Participants



Height and weight are concerns when determining whether an individual is physically capable of handling a particular all-terrain vehicle. (Other concerns are physical strength and cognitive maturity.) In our Phase I population, Height and Weight demographics are as follows:

#### HEIGHT

30-39 IN	=	15 youth	=	.3%
40-49 IN	=	140 youth	=	2.8%
50-59 IN	=	1483 youth	=	29.4%
60-69 IN	=	2848 youth	=	56.4%
70-79 IN	=	561 youth	=	8.7%

#### WEIGHT

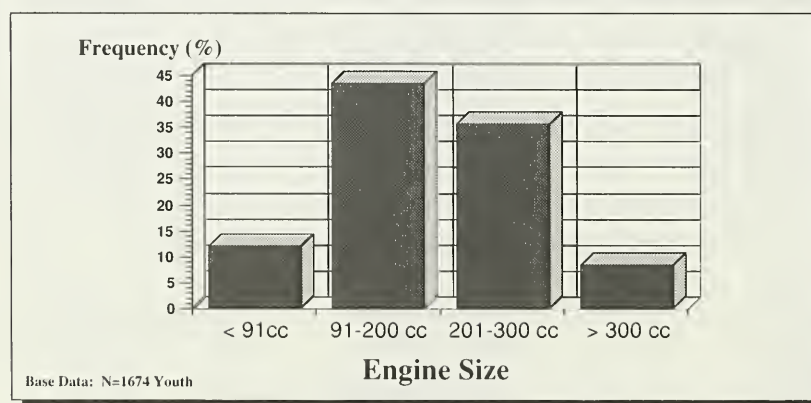
40-59 LBS	=	129 youth	=	2.7%
60-79 LBS	=	885 youth	=	18.3%
80-99 LBS	=	1249 youth	=	25.9%
100-119 LBS	=	1098 youth	=	22.7%
120-139 LBS	=	728 youth	=	15.1%
140-159 LBS	=	465 youth	=	9.6%
160-179 LBS	=	237 youth	=	4.9%
180-199 LBS	=	8 youth	=	.2%
200-219 LBS	=	9 youth	=	.2%
220-239 LBS	=	10 youth	=	.2%
240-350 LBS	=	11 youth	=	.2%

## ATV ACCESS

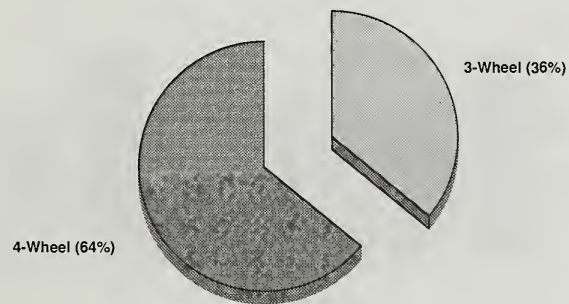
According to data from the U.S. Consumer Product Safety Commission, a high proportion of ATV-related injuries and fatalities among youth are related to riding ATVs which are too large for them and riding with limited training and experience. Phase I evaluation research of the 4-H Community ATV Safety Program documents the following demographics and experience of youth participants:

39.4%	=	families own at least one ATV
87.9%	=	ride an ATV that is 91cc or larger
36.3%	=	ride at least daily or weekly
53.5%	=	3 years or less riding experience.

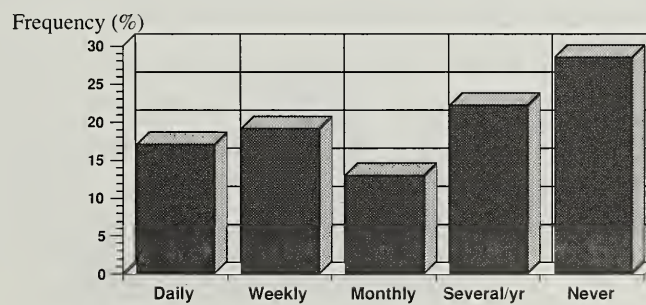
### ATV Experience of Youth What Size ATV's Are Youth Riding?



### ATV Experience of Youth Do Youth Ride 3 or 4-Wheel ATV's?

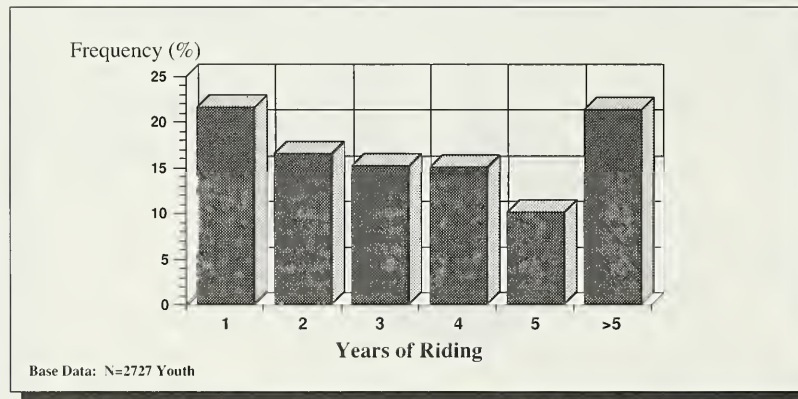


### ATV Experience of Youth How Often Do Youth Ride?



Base Data: N=4984 Youth

## ATV Experience of Youth Years of Riding



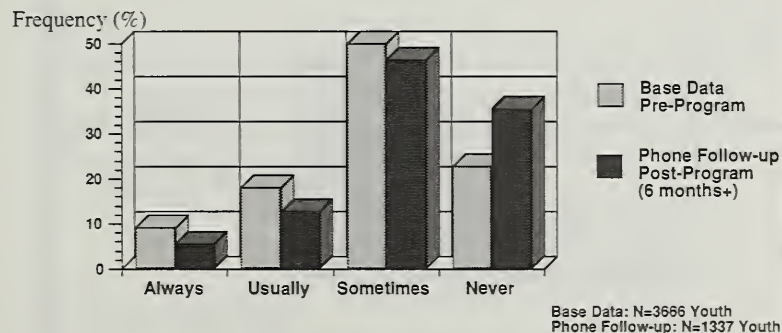
### RISK FACTORS AND BEHAVIOR CHANGE

The focus of all local educational efforts evolving from the 4-H Community ATV Safety Program is to improve the behaviors of young people who ride ATVs that relate to the risk factors of infrequent helmet use, carrying passengers, riding on pavement and riding on or alongside of a road. The following bar charts support the analysis which indicates statistically significant behavior change in youth between the collection of base data (with pre-program “registration forms”) and a phone interview follow-up 6-8 months later.

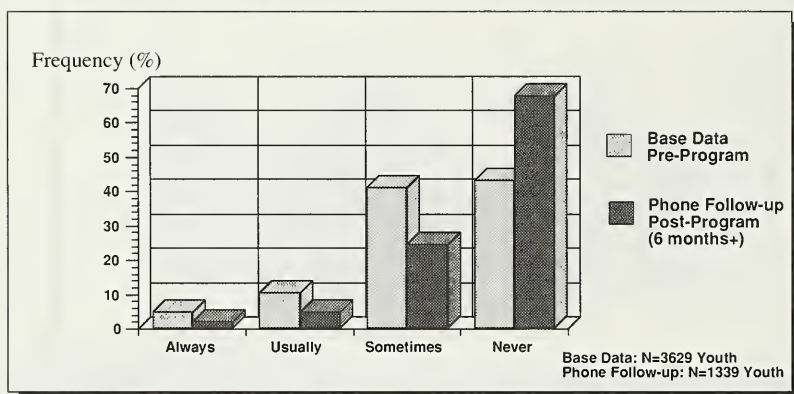
## Risk Factors For ATV Operators: How Often Do Youth Wear a Helmet?



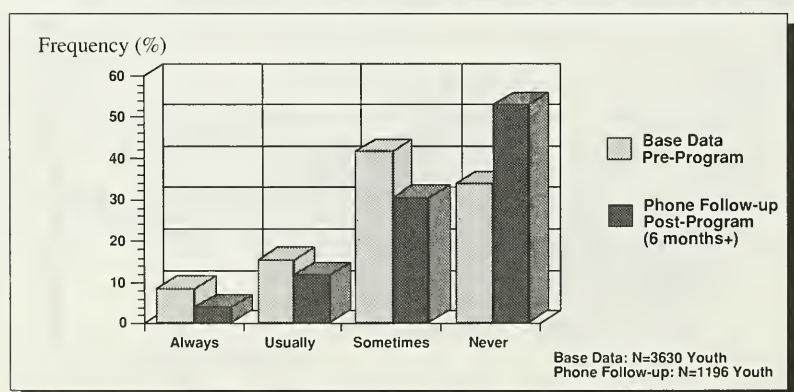
## Risk Factors For ATV Operators: How Often Do Youth Carry Passengers?



## Risk Factors For ATV Operators: How Often Do Youth Ride on Pavement?



## Risk Factors For ATV Operators: How Often Do Youth Operate ATV's On/Alongside Roads?



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The mail survey conducted with youth as part of Phase I evaluation allowed the researchers to gather information on some additional open-ended questions. Their responses indicate an understanding of the risks and behavior changes which will help them minimize risk on a very personal level. A summary of the most common responses to the key questions is offered here for the reader's information.

**What Role Do Adults/Parents Have in Helping Young People Avoid ATV-Related Injuries?**

**The Most Common Responses Were:**

- 40.2% — Supervise/Set Limits
- 24.1% — Provide Training
- 23.9% — Require Protective Gear
- 3.2% — Set Example/Role Model

Mail Survey: n=778 Youth; Response Rate = 17%

**How Can You Decide if Someone Under 16 Years old Can Safely Operate a Specific ATV?**

**The Most Common Responses Were:**

- 35.1% — Rider/ATV "Fit"
- 19.8% — Test Them
- 12.5% — Maturity & Responsibility
- 11.1% — Provide Training

Mail Survey: N=758 Youth; Response Rate=17%

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Results of the Phase I mail survey to youth indicate that information is being shared widely with family members and others close to them. The following questions and summary responses indicate that the positive effects of the ATV safety education efforts go far beyond the youth with whom program staff and collaborators have personal contact. Youth are asked:

Have you shared the information or experience from the ATV safety program with others? They responded with a resounding “YES”!

Percent	
Yes	74.8
No	25.2

**Have You Made Any Changes in Your Use of ATV's  
As A Result of Participating in the  
4-H Community ATV Safety Program?**

**70.6% Responded "YES"!**

The Most Common Examples of Change Were:

- More Careful/Drive More Slowly
- Wear More Protective Gear
- Wear Helmet More Often

Mail Survey: N=650 Youth; Response Rate = 17%

Further, researchers asked, “Have you made any changes in your use of ATVs as a result of participating in the 4-H Community ATV Safety Program?” Responses here are the coding of open-ended comments by participants:

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## BEHAVIOR CHANGE EXPLANATION

	Percent
Helmet more often	26.7
Slower speeds	22.3
More safety conscious	9.9
Not riding double	8.9
Less horsing around	7.4
Techniques	6.4
Protective gear more often	4.2
Other	4.0
Stays off pavement	3.8
Already safety conscious	1.9
NA	1.8
Do not ride anymore	1.1
Size of vehicle	.6
No response	.1



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## V. PHASE II EVALUATION RESEARCH

By the summer of 1992, statistically significant behavior change had been clearly documented in all key areas for which the program seeks behavior change among its youth participants. Parties to the research design agreed it was time to modify the research to address additional questions. The collection of base data from youth participants via the "registration form" developed in 1990 was continued, but an intervention was initiated after their receipt in the national office. Mail surveys to youth (which duplicated information from the later phone interviews) were replaced with a different mail survey directed to adults responsible for the youth.

### THE INTERVENTION

In August 1992, the national program office began to send a letter and the "Safety Tips for the ATV Rider" brochure to adults responsible for youth participants as registration forms were received and mailing data entered. The letter simply states that the child has recently participated in an ATV safety workshop and that the main points covered are outlined in the brochure for their reference. Adults are also notified at this time that they will be receiving a mail survey in a few months and that the national staff may call 6-8 months later to conduct a phone interview with the young person who participated in the workshop.

### DATA ANALYSIS

Because of the time lapses desired between collection of base data/program participation and the mail surveys and phone interviews, Phase II research is still in progress. Statistically significant behavior change on all of the risk factors is already documented, however, with much smaller population sizes. To date, 62% of the participants who are riders have been contacted by phone. Some surveys were purged because of incomplete information, others due to no response after four attempts. In addition, youth responding to the phone interviews indicate that their parents are going over the brochure with them in detail when it is received a month or so after participating in the program.

As noted in the introduction above, Phase II analysis is preliminary. The following discussion summarizes some of the findings to date and highlights a particularly important finding which has implications for the development of Phase III.

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In general, Phase II results support those of Phase I, particularly in the overall significance for risk behavior change as well as significant change in terms of the important category of 12-16 year-olds.

Phase II provides additional data in the form of adult responses to a mailed questionnaire. First, let's look at some of the demographic data about the adults responding to the mail survey.

#### PHASE II DESCRIPTIVE DATA - MAIL SURVEY TO ADULTS

##### EDUCATION OF ADULTS

	Percent
Grade School	1.8
High School Graduate	25.3
Some College	26.2
Technical School	9.3
2-Year Degree	7.1
Bachelors Degree	19.9
Graduate Degree	10.4

##### MARITAL STATUS

	Percent
Single	2.4
Married	90.6
Divorced	4.1
Widowed	1.8
Separated	1.2

# GROSS FAMILY INCOME FOR PREVIOUS YEAR

	Percent
< \$10,000	4.8
\$10,000 - \$19,999	10.0
\$20,000 - \$29,999	23.1
\$30,000 - \$39,999	21.7
\$40,000 - \$49,999	17.2
\$50,000 - \$64,999	11.4
\$65,000 - \$79,999	5.2
\$80,000 or more	6.6

## RESIDENCE

	Percent
Farm (annual sales >\$2,000)	44.4
Town (pop. <10,000 & rural non-farm)	34.1
Town or City and Suburbs (pop. 10,000 to 50,000)	14.5
Suburb of City (pop. >50,000)	3.3
City (pop. >50,000)	3.6

## IS CHILD MEMBER OF 4-H?

	Percent
Yes	82.3
No	17.7

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Also, in the Phase II mail survey researchers wanted to determine the most effective sources of information and strategies to reach adults with further help to address safety issues with young people. The following illustrate responses to these questions.

**What is the Most Credible or Dependable Source of Safety Information?**

**The Top-ranked Responses Were:**

- 35.5% — Formal Education
- 32.2% — Youth-Serving Organizations
- 15.6% — Interest Groups/Clubs

Mail Survey: N=160 Adults; Response Rate= 8%

**How Would You Prefer to Receive Information Concerning ATV Safety?**

**The Top-ranked Responses Were:**

- 26.5% Videotapes
- 23.0% Pamphlets or Books
- 20.3% Group Meetings

Mail Survey: N=170 Adults; Response Rate= 8%

---

**What Would Be the Best Thing We Could Do to Further Assist You in Addressing Safe ATV Operation?**

**The Most Common Responses Were:**

- 25.4% Keep Emphasizing Safety
- 12.7% Send Updates/Newsletters
- 11.2% Provide More Training

Mail Survey: N= 134; Response Rate= 8%

One early finding in Phase II is particularly important as it led directly to the strategy for Phase III. Specifically, the behavior change in terms of risk factors in Phase II was significantly stronger than in Phase I. Because the only difference in Phase II was a brochure mailed to the parents of participants, it was hypothesized that the brochure itself may have had an impact on the risk-related behaviors. Accordingly, an experimental design was developed to test this hypothesis and is just now being put into effect.



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## VI. PHASE III EVALUATION RESEARCH INITIATED FALL 1993

New research of Phase III (final) design utilizes random assignment of adults into two groups, one which receives the treatment (the mailed letter and brochure) and one which does not. This is a powerful design which permits the drawing of causal inferences. In other words, if significant differences in changes of risk-related behavior are observed between youth of parents who have received the brochure and youth of parents who have not received the brochure, then the conclusion can be drawn that the brochure was, indeed, the cause of the differences. This will be tested in Phase III.



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## VII. APPENDICES



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## APPENDIX A EVALUATION ANALYSIS NOTES

### SIGNIFICANCE LEVEL

The significance level is the likelihood that the difference between the means of the two groups is actually zero (i.e., the means are really the same), when they are actually different. In other words, if the significance level in the t-test is .05, then you would be wrong five times out of 100 when claiming that the mean of the two groups was different. While the .05 level is the “standard” that most social science research is conducted by, reporting the actual level allows each person to see and accept the level of risk with which they are most comfortable.

The appropriate way to communicate findings is to say that: using the paired t-test the difference in the mean between two variables (e.g., participant age and helmet use) was in the expected/appropriate direction and is significant at the .XXX level. Any claims about causality, or attribution of the program to behavior change are dependent on the program design.

### PAIRED T-TEST

The t-test compares the means of the paired measurements. If the two sample means are far enough apart, the t-test will yield a significant difference, thus permitting one to conclude that the two measurements do not have the same mean.

A paired t-test can be used when one can logically tie data in one group to data in a second group. The logical tie here is that we are repeating the measures on the same group.



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APPENDIX B  
PHASE I RESEARCH INSTRUMENTS

# 4-H COMMUNITY ATV SAFETY Activity Summary



Please complete the following request for information and use as a cover sheet for Registration Forms completed by participants at the first session of each program or activity conducted as a result of your state's participation in the National 4-H Community ATV Safety Program. If the program is comprised of only one session, we want Registration Forms from those participants also. This cover sheet and complete set of the top copies of the Registration Form should be sent as soon as possible after the completion of a program/activity to:

COMMUNITY ATV SAFETY PROGRAM  
National 4-H Council  
7100 Connecticut Ave.  
Chevy Chase, MD 20815

NAME OF CONTACT PERSON \_\_\_\_\_

DATE \_\_\_\_\_  
Month Day Year

ADDRESS \_\_\_\_\_  
\_\_\_\_\_

PHONE \_\_\_\_\_

NUMBER OF HOURS IN TODAY'S PROGRAM \_\_\_\_\_ hours

DURATION OF TOTAL PROGRAM (i.e. one session, 4-5 weekly meetings, etc.)  
\_\_\_\_\_

Which best describes the teaching approaches used in today's session?

CHECK ONE:

- ☐ LECTURE
- ☐ GROUP DISCUSSION
- ☐ PRACTICE/DEMO OF "HOW TO FIT AN ATV TO A RIDER" WRITTEN GAMES AND QUIZZES
- ☐ ROLE PLAYING
- ☐ FILM/VIDEO
- ☐ GUEST SPEAKER
- ☐ RIDING EXERCISES ON AN ATV
- ☐ ATV DEMONSTRATION
- ☐ TRAIL RIDE; DRIVING SKILLS CONTEST
- ☐ OTHER (PLEASE DESCRIBE) \_\_\_\_\_

PROGRAM SITE \_\_\_\_\_  
Town/City State

COMMENTS/FURTHER EXPLANATIONS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

***(Must be completed by each participant)***



TOWN/CITY	STATE	ZIP CODE
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BIRTHDATE \_\_\_\_\_

MONTH DAY YEAR

OTHER \_\_\_\_\_ % (Please describe) \_\_\_\_\_

☐ FRIEND'S PARENT

# 4-H COMMUNITY ATV SAFETY PROGRAM A SURVEY OF PARTICIPANTS



1. NAME OF YOUR STATE \_\_\_\_\_
2. AGE (IF UNDER 21 YEARS, GIVE BIRTHDATE)  
BIRTHDATE \_\_\_\_\_  
                    MONTH                      DAY                      YEAR  
CHECK APPROPRIATE SPACE IF 21 YEARS OR OLDER.  
☐ 21-30            ☐ 41-50            ☐ 61-70  
☐ 31-40            ☐ 51-60            ☐ 71+
3. HOW LONG HAVE YOU BEEN RIDING AN ATV?  
\_\_\_\_\_ YEARS    \_\_\_\_\_ MONTHS
4. TELL US ABOUT YOUR ATV RIDING EXPERIENCE SINCE THE ATV SAFETY PROGRAM.  
A. DO YOU RIDE AN ATV REGULARLY?  
YES ☐            NO ☐  
B. HOW OFTEN DO YOU RIDE AN ATV?  
☐ DAILY            ☐ SEVERAL TIMES A YEAR  
☐ WEEKLY            ☐ NOT AT ALL  
☐ MONTHLY  
C. WHAT TYPE OF ATV DO YOU RIDE?  
ENGINE SIZE: \_\_\_\_\_ CC  
CHECK ONE:    ☐ 3-WHEEL    ☐ 4-WHEEL
5. WHAT PERCENTAGE OF THE TIME DO YOU RIDE AN ATV FOR EACH OF THE FOLLOWING PURPOSES?  
(PLEASE BE SURE PERCENTAGES ADD UP TO 100%!!)  
\_\_\_\_\_ % WORK  
\_\_\_\_\_ % RECREATION  
\_\_\_\_\_ % OTHER — PLEASE DESCRIBE \_\_\_\_\_
6. HOW OFTEN DO YOU WEAR A HELMET WHEN YOU RIDE AN ATV?  
☐ ALWAYS  
☐ USUALLY  
☐ SOMETIMES  
☐ NEVER
7. HOW OFTEN DO YOU CARRY A PASSENGER WHEN OPERATING AN ATV?  
☐ ALWAYS  
☐ USUALLY  
☐ SOMETIMES  
☐ NEVER
8. HOW OFTEN DO YOU OPERATE AN ATV ON PAVEMENT (OTHER THAN SIMPLY CROSSING A WALK OR DRIVE)?  
☐ ALWAYS  
☐ USUALLY  
☐ SOMETIMES  
☐ NEVER
9. HOW OFTEN DO YOU OPERATE YOUR ATV ON OR ALONG SIDE THE ROAD?  
☐ ALWAYS  
☐ USUALLY  
☐ SOMETIMES  
☐ NEVER

10. HAVE YOU MADE ANY CHANGES IN YOUR USE OF ATVS AS A RESULT OF PARTICIPATING IN THE 4-H ATV SAFETY PROGRAM? (EXAMPLES — RIDING DIFFERENTLY, EQUIPMENT, CLOTHING, RELATING TO OTHER ATV OPERATORS OR RIDERS???) PLEASE EXPLAIN.

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11. HOW CAN YOU DECIDE IF SOMEONE UNDER 16 YEARS OLD CAN SAFELY OPERATE A SPECIFIC ATV?

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12. HAVE YOU SHARED THE INFORMATION OR EXPERIENCE FROM THE ATV SAFETY PROGRAM WITH OTHERS?

☐ YES ☐ NO

IF YES, PLEASE TELL US WHAT YOU HAVE SHARED AND HOW PEOPLE RESPONDED.

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13. WHAT ROLE DO ADULTS/PARENTS HAVE IN HELPING YOUNG PEOPLE AVOID ATV-RELATED INJURIES?

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14. WHAT ARE THE MAIN RISKS FOR KIDS UNDER THE AGE OF 16 WHO RIDE ATVS?

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15. SINCE YOU PARTICIPATED IN THE 4-H ATV SAFETY PROGRAM, HAVE YOU HAD ANY ATV-RELATED ACCIDENTS THAT REQUIRED YOU OR SOMEONE ELSE INVOLVED TO SEE A DOCTOR OR RECEIVE EMERGENCY MEDICAL ATTENTION?

☐ YES ☐ NO

IF YES, PLEASE DESCRIBE

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16. ADDITIONAL COMMENTS?

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Recently a survey was mailed to you concerning the 4-H Community ATV Safety Program. The survey is being used to determine the effectiveness of this program.

If you have already completed and returned the survey, please accept our thanks. If not, please fill in and return the survey to us today. It is very important that we be able to include your comments in our evaluation of the program. We want to hear from all program participants!

If by some chance you did not receive the survey or it has been misplaced, please give me a call at (703) 552-6733. I'll get another copy out to you as soon as possible.

Yours truly,



Susan W. Halbert  
National Coordinator  
4-H Community ATV Safety Program



TBS 5505 (9210)

4-H COMMUNITY ATV SAFETY PROGRAM EVALUATION

PHONE SURVEY - YOUTH

RECORD # \_\_\_\_\_

DATE \_\_\_\_\_ INTERVIEWER \_\_\_\_\_

RESPONDENT \_\_\_\_\_ PHONE # (\_\_\_\_) \_\_\_\_\_

STATE \_\_\_\_\_ BIRTHDATE \_\_\_\_\_

RIDE REGULARLY? \_\_\_\_ YES \_\_\_\_ NO 3-WHEEL \_\_\_\_ 4-WHEEL \_\_\_\_

HOW LONG? \_\_\_\_\_  
YEARS MONTHS

HOW OFTEN? \_\_\_\_ DAILY \_\_\_\_ WEEKLY \_\_\_\_ MONTHLY  
\_\_\_\_ SEVERAL TIMES A YEAR \_\_\_\_ NEVER

HOW OFTEN DO YOU WEAR A HELMET WHEN RIDING?

\_\_\_\_ ALWAYS \_\_\_\_ USUALLY \_\_\_\_ SOMETIMES \_\_\_\_ NEVER

HOW OFTEN DO YOU CARRY A PASSENGER WHEN OPERATING AN ATV?

\_\_\_\_ ALWAYS \_\_\_\_ USUALLY \_\_\_\_ SOMETIMES \_\_\_\_ NEVER

HOW OFTEN DO YOU OPERATE ON PAVEMENT OTHER THAN SIMPLY CROSSING  
A WALK OR DRIVE?

\_\_\_\_ ALWAYS \_\_\_\_ USUALLY \_\_\_\_ SOMETIMES \_\_\_\_ NEVER

HOW OFTEN DO YOU OPERATE YOUR ATV ON OR ALONG SIDE OF THE  
ROAD?

\_\_\_\_ ALWAYS \_\_\_\_ USUALLY \_\_\_\_ SOMETIMES \_\_\_\_ NEVER

---

HAVE THERE BEEN ANY OCCASIONS WHEN INFORMATION OR EXPERIENCE  
FROM THE ATV TRAINING ACTUALLY HELPED PREVENT AN INJURY?

CAN YOU THINK OF A SPECIFIC INSTANCE WHEN YOU AVOIDED INJURY  
BY WEARING A HELMET?

DID YOU TELL FRIENDS OR FAMILY MEMBERS ABOUT THE NEED TO WEAR  
HELMETS OR NOT RIDE DOUBLE? \_\_\_\_\_ YES \_\_\_\_\_ NO

DID THEY RESPOND POSITIVELY? \_\_\_\_\_ YES \_\_\_\_\_ NO

HAVE YOU CHANGED YOUR BEHAVIOR IN OTHER WAYS AFTER THE ATV  
WORKSHOP/TRAINING? \_\_\_\_\_ YES \_\_\_\_\_ NO

IF YES, PLEASE EXPLAIN

DO YOU THINK DIFFERENTLY ABOUT THE RISKS INVOLVED IN RELATED  
ACTIVITIES AS A RESULT OF PARTICIPATION IN THE ATV WORKSHOP?  
\_\_\_\_\_ YES \_\_\_\_\_ NO

IF YES, PLEASE EXPLAIN

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APPENDIX C  
PHASE II RESEARCH INSTRUMENTS

# 4-H COMMUNITY ATV SAFETY Activity Summary



Please complete the following request for information and use as a cover sheet for Registration Forms completed by participants at the first session of each program or activity conducted as a result of your state's participation in the National 4-H Community ATV Safety Program. If the program is comprised of only one session, we want Registration Forms from those participants also. This cover sheet and complete set of the top copies of the Registration Form should be sent as soon as possible after the completion of a program/activity to:

COMMUNITY ATV SAFETY PROGRAM  
National 4-H Council  
7100 Connecticut Ave.  
Chevy Chase, MD 20815

NAME OF CONTACT PERSON \_\_\_\_\_

DATE \_\_\_\_\_  
Month Day Year

ADDRESS \_\_\_\_\_  
\_\_\_\_\_

PHONE \_\_\_\_\_

NUMBER OF HOURS IN TODAY'S PROGRAM \_\_\_\_\_ hours

DURATION OF TOTAL PROGRAM (i.e. one session, 4-5 weekly meetings, etc.)  
\_\_\_\_\_

Which best describes the teaching approaches used in today's session?

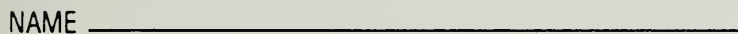
CHECK ONE:

- ☐ LECTURE
- ☐ GROUP DISCUSSION
- ☐ PRACTICE/DEMO OF "HOW TO FIT AN ATV TO A RIDER" WRITTEN GAMES AND QUIZZES
- ☐ ROLE PLAYING
- ☐ FILM/VIDEO
- ☐ GUEST SPEAKER
- ☐ RIDING EXERCISES ON AN ATV
- ☐ ATV DEMONSTRATION
- ☐ TRAIL RIDE; DRIVING SKILLS CONTEST
- ☐ OTHER (PLEASE DESCRIBE) \_\_\_\_\_

PROGRAM SITE \_\_\_\_\_  
Town/City State

COMMENTS/FURTHER EXPLANATIONS:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

***(Must be completed by each participant)***



PHONE NUMBER ( ) \_\_\_\_\_  
AREA CODE

ADDRESS \_\_\_\_\_  
STREET / ROUTE / P.O. BOX

TOWN/CITY	STATE	ZIP CODE
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1. Age (if under 21 years, give birthdate)

BIRTHDATE \_\_\_\_\_  
MONTH DAY YEAR

Check appropriate space if 21 years or older.

☐ 21-30      ☐ 41-50      ☐ 61-70  
☐ 31-40      ☐ 51-60      ☐ 70+

2. Height \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
Weight \_\_\_\_\_ LBS.

3. Does your family own at least one ATV?  
☐ YES      ☐ NO

4. Do you ride an ATV regularly?  
☐ YES      ☐ NO

5. How many different ATVs do you operate regularly?

PLEASE DESCRIBE	ATV #1	ATV #2	ATV #3	ATV #4
ENGINE SIZE	_____ CC	_____ CC	_____ CC	_____ CC
3 OR 4 WHEEL	_____	_____	_____	_____

Circle the ATV(s) you ride most often.

Who owns the ATV you use most often? \_\_\_\_\_

6. How long have you been riding an ATV?  
 \_\_\_\_\_ YEARS \_\_\_\_\_ MONTHS

7. In the past year, how often did you ride an ATV?

☐ DAILY                      ☐ SEVERAL TIMES A YEAR  
☐ WEEKLY                 ☐ NEVER  
☐ MONTHLY

8. What percentage of the time is your ATV used for each of the following purposes? (Please be sure percentages add up to 100%!) \_\_\_\_\_

WORK \_\_\_\_\_ %

RECREATION \_\_\_\_\_ %

OTHER \_\_\_\_\_ % (Please describe) \_\_\_\_\_

9. How often do you wear a helmet when you ride an ATV?

☐ ALWAYS  
☐ USUALLY  
☐ SOMETIMES  
☐ NEVER

10. How often do you carry a passenger when operating an ATV?

☐ ALWAYS  
☐ USUALLY  
☐ SOMETIMES  
☐ NEVER

11. How often do you operate your ATV on pavement other than simply crossing a walk or drive?

☐ ALWAYS  
☐ USUALLY  
☐ SOMETIMES  
☐ NEVER

12. How often do you operate your ATV on or along side the road?

☐ ALWAYS  
☐ USUALLY  
☐ SOMETIMES  
☐ NEVER

13. In the past year, have you had any ATV-related accidents that required you or someone else involved to see a doctor or receive emergency medical attention?

☐ YES      ☐ NO

If yes, please describe in the space below

14. Who taught you to ride an ATV? (Check all that apply)

☐ FATHER ☐ OTHER (Please explain) \_\_\_\_\_

☐ MOTHER

☐ ATV INSTRUCTOR

☐ BROTHER

☐ SISTER☐ FRIEND☐ FRIEND'S PARENT



Blacksburg Office  
510 South Main, Blacksburg, Virginia 24060  
(703) 552-6733 • FAX: (703) 951-0089

October 1993

Hello! Recently, a child in your household participated in the ATV Safety Program. The program is designed to promote the safety of people - especially children - who ride all-terrain vehicles (ATVs). We would like all families to know as much as possible about ATV safety so they can also promote safe riding practices. With that in mind, we are sending the enclosed Safety Tips Brochure to all households of participants. We hope this brochure will be useful.

As a part of our continuing efforts to promote ATV safety, a survey will be sent to you in the near future. The survey will ask for your observations on the child's behavior after taking the program and for any suggestions you might have.

Yours truly,

Susan W. Halbert  
National Coordinator  
4-H Community ATV Safety Program

## How To "Fit" An ATV To A Rider

It is important that your ATV fits you. As with many things, if your ATV fits, it will not only make you safer, but you will be a better rider and it will be more enjoyable. You should be a good match with your ATV not only in size, but in strength. This will allow you to control it better, especially when you ride in more difficult terrain. Use these guidelines to help determine if your ATV is the right size for you.

**1. Clearance between ATV seat and inseam while standing up on footrests** – Clearance is needed for two reasons: 1) to permit you to stand up and absorb shocks through your legs while riding on rough terrain; and 2) to minimize the possibility of your being struck by the seat and being catapulted over the handlebars. Three inches should be a minimum clearance. The maximum will be suggested by the reference point below. Proper clearance will also improve your visibility and comfort.

**2. Upper legs** – The upper portion of the leg, roughly from the top of the knee to the hip (or the lap if sitting in a chair) should be approximately horizontal. A little above or below the horizontal should not be troublesome, but gross departures (knees being significantly above or below the hips) should be viewed as a case for further checking. If your knees are significantly above your hips, turn the handlebars in both directions and check for contact with the knees or legs.

**3. Foot length** – With the heel of your right boot locked against the footpeg or in the

proper position on the running board, the toe of your boot should be able to depress the footbrake with a simple downward rotation of the foot. Contact with engine or exhaust protrusions should be examined. You should be able to operate the brakes consistently without hesitation. The same principle applies to the left side of the ATV where the gearshift is located on some models.

**4. Grip reach** – In the normal seated position with your hands on the handlebars, your elbows should have a distinct angle between the upper arm and your forearm. If your elbows are straight out, you will not be able to turn the handlebars. Also, check to see if you are leaning forward to compensate for a short reach. If your elbows are at less than right angles, you are too large for the ATV. Steering will be difficult and possibly throw you off balance.

**5. Throttle reach** – With your right hand in the normal operating position, check to see if your thumb can easily operate the throttle. Turn the handlebars to both the extreme left and extreme right position and check again for any interference with easy operation.

**6. Brake reach** – With your hands in the normal operating position and your fingers straight out, check to see if the first joint (from the tip) of your middle finger extends beyond the brake lever. If it does not, your hand is too small to effectively grasp the lever in an emergency. Make sure your thumb also reaches the emergency switch. Try squeezing the brake lever a few times to be sure you can comfortably operate the controls.

The ATV Safety Institute offers a hands-on ATV RiderCourse nationwide. To locate an ATV rider training course nearest you, call toll-free 1-800-447-4700.

The U.S. Consumer Product Safety Commission also has additional information on ATV safety. Call the CPSC's toll-free number at 1-800-638-2772; teletypewriter for the hearing impaired is available at 1-800-638-8270; the Maryland TTY number is 1-800-492-8104 or write U.S. Consumer Product Safety Commission, Washington, D.C. 20207.



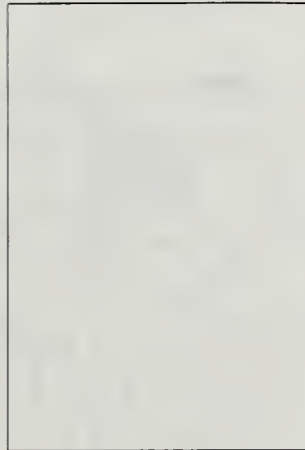
**Arranged by:**  
National 4-H Council

**Information by:**  
U.S. Consumer Product Safety Commission

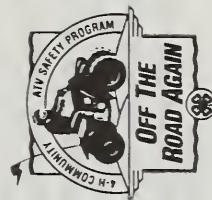
**HONDA**

**Funding provided by:**  
American Honda Motor Co., Inc.

For more information about the  
4-H Community ATV Safety Program, contact:



# Safety Tips For The ATV Rider



All-terrain vehicles have many uses and promise new adventures to young and old alike. But ATVs are not toys and riding one can be a potentially hazardous activity, especially for young people under the age of 16 years. They are at particular risk when they operate adult-size ATVs. **Adequate physical size and strength, emotional maturity, ability to assess a situation and take appropriate action, and good motor skills are all important factors for youth operating motorized vehicles.**

Over 1400 ATV-related deaths have been reported to the U.S. Consumer Product Safety Commission (CPSC) since 1982. Approximately 40 percent of the victims were under 16 years old. Almost 20 percent were under 12 years of age.

ATVs require constant attention to avoid accidents. Young people under the age of 16 should not operate adult-sized (over 90 cc) ATVs. The risk of injury for 12-15 year old drivers of adult-sized ATVs is over two times the average risk of injury on ATVs.

**Size:** We recognize that there are young people under the age of 16 who ride ATVs larger than the recommended sizes. In these instances, you are urged to review the guidelines on "How to 'Fit' an ATV to a Rider" (see reverse). The elements of "fit" outlined are important to the safety of ATV operators of all ages.

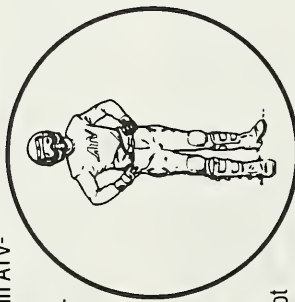
**Age:** Younger riders may not have the decision-making ability or judgment to recognize the dangers and quickly react in a proper and timely manner.

**Skill:** You need to be honest about your basic skills as an ATV operator. If you want to improve your skills, take a training course. The ATV Safety Institute offers a hands-on ATV RiderCourse nationwide.

To locate the training course nearest you, call toll-free 1-800-447-4700.

### **Helmets Save Lives. Wear Protective Equipment.**

Helmets could have saved the lives of approximately 25 percent of the people who died from head injuries in ATV-



related accidents. In a recent injury survey, three-fourths of the operators with head injuries were not wearing an approved helmet. The risk of head injury for unhelmeted riders is twice as high as for those wearing helmets.

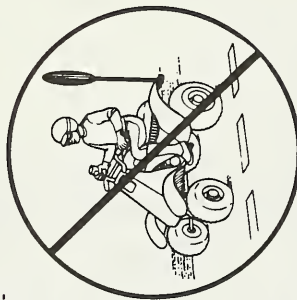
Protective clothing is the badge of a responsible, safe rider. Always wear an approved motorcycle or ATV helmet, eye protection and protective clothing.

### **No Paved Roads or Alcohol!**

Almost 10 percent of the injuries and over 25 percent of the deaths occurred while someone was operating an ATV on paved roads. Many of the accidents occur because of collisions with other vehicles.

ATVs are designed for off-road use only. Never operate an ATV on paved surfaces or public roads.

Substance abuse is especially dangerous when operating an ATV. Never consume alcohol or drugs before or during the operation of an ATV. In 30 percent of all fatal ATV accidents, some alcohol use was mentioned.



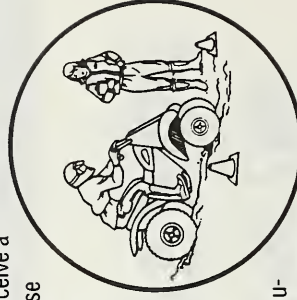
### **Don't Show Off! Keep Speed Under Control.**

Speeding and stunts (wheelies, jumps, etc.) are common among young operators, especially when peer pressure is involved. Stunt riding will increase your risk of losing control with potentially critical results. Never operate an ATV at excessive speeds.



### **Take a Training Course.**

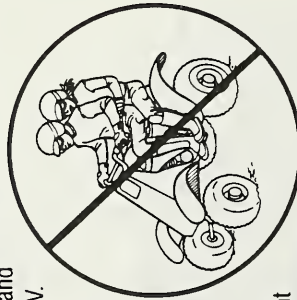
A hands-on training course is recommended for all ATV operators. Inexperienced riders in their first month of using an ATV have 13 times the average risk of injury. Beginning riders should receive a training course from a qualified instructor. Basic maneuvers taught in training should be practiced regularly on safe terrain.



### **No Passengers! Do Not Ride Double.**

ATVs are designed for one operator and no passengers. The presence of a passenger will seriously impair your ability to shift weight in order to steer and control the ATV.

In the CPSC injury survey, 31 percent of the operators carried passengers on their ATV and 20 percent of the injured people were passengers.





7100 Connecticut Avenue, Chevy Chase, Maryland 20815-4999  
(301) 961-2800 • FAX: (301) 961-2894

October 1993

Hi! I want to know what you think of the ATV Safety Program that a child in your household participated in recently. We are collecting valuable information from the adults responsible for children who participated in this program.

Are you interested in helping to promote the safety of people - especially children - who ride all-terrain vehicles (ATVs)? The 4-H Community ATV Safety Program is doing just that through the efforts of teams of adults in 39 states nationwide. Workshops, staffed exhibits, 4-H Club meetings, camps and mass media are just a few of the approaches being used. We want to teach young people who ride ATVs and the adults responsible for them the importance of wearing protective gear and learning to avoid the riding practices which frequently contribute to ATV accidents.

You can help us continue this important safety program by completing and returning the enclosed questionnaire as soon as possible. Thanks to your comments and feedback, we'll be able to improve on our current efforts! Our records show that a child in your household participated in some activity of the 4-H Community ATV Safety Program during the past year. Whether the child is a 4-H member or not, the information that you can contribute is very valuable. We'd like to hear from you about the effects of this program and get your ideas about what we can do to improve it. Also, in a few months we will be telephoning a sample of kids who participated to survey them on what they got out of the program.

Your comments will remain confidential. A reply envelope is enclosed for you to use to return your completed survey.

Good quality programs for young people don't just happen. You are one of the best people to tell us what works for kids. Please help the 4-H Youth Development Program by completing and returning the enclosed survey TODAY!

Please complete the enclosed survey and put it in the mail by October 31, 1993. Thanks---in advance!

Yours truly,

Susan W. Halbert  
National Coordinator - 4-H Community ATV Safety Program

# 4-H COMMUNITY ATV SAFETY PROGRAM A SURVEY



1. YOUR STATE NAME: \_\_\_\_\_

PLEASE CHECK THE APPROPRIATE RESPONSE FOR YOURSELF IN QUESTIONS 2-7.

2. AGE:

- |                                |                                |                                |
|--------------------------------|--------------------------------|--------------------------------|
| <input type="checkbox"/> 21-30 | <input type="checkbox"/> 41-50 | <input type="checkbox"/> 61-70 |
| <input type="checkbox"/> 31-40 | <input type="checkbox"/> 51-60 | <input type="checkbox"/> 71+   |

3. OCCUPATION: \_\_\_\_\_

4. EDUCATION:

- ☐ GRADE SCHOOL
- ☐ HIGH SCHOOL GRADUATE
- ☐ SOME COLLEGE
- ☐ TECHNICAL SCHOOL
- ☐ 2-YEAR DEGREE
- ☐ BACHELOR'S DEGREE
- ☐ GRADUATE DEGREE

5. MARITAL STATUS:

- |                                    |                                  |
|------------------------------------|----------------------------------|
| <input type="checkbox"/> SINGLE    | <input type="checkbox"/> MARRIED |
| <input type="checkbox"/> DIVORCED  | <input type="checkbox"/> WIDOWED |
| <input type="checkbox"/> SEPARATED |                                  |

6. GROSS FAMILY INCOME FOR '91:

- ☐ less than \$10,000
- ☐ \$10,000 - \$19,999
- ☐ \$20,000 - \$29,999
- ☐ \$30,000 - \$39,999
- ☐ \$40,000 - \$49,999
- ☐ \$50,000 - \$64,999
- ☐ \$65,000 - \$79,999
- ☐ \$80,000 or more

7. RESIDENCE:

- ☐ FARM (annual sales >\$2,000)
- ☐ TOWN (pop. <10,000 & rural non-farm)
- ☐ TOWN OR CITY & SUBURBS (pop. 10,000 to 50,000)
- ☐ SUBURB OF CITY (pop. >50,000)
- ☐ CITY (pop. >50,000)

8. FAMILY SIZE:

NUMBER OF CHILDREN \_\_\_\_\_  
AGES \_\_\_\_\_

9. DOES YOUR FAMILY OWN AT LEAST ONE ATV?

- ☐ YES ☐ NO

10. DOES YOUR FAMILY OWN HELMETS FOR USE IN RIDING ATV's?

- ☐ YES ☐ NO

FOR QUESTIONS 11-20 PLEASE CHECK OR FILL IN THE APPROPRIATE RESPONSE FOR YOURSELF AND THE CHILD WHO PARTICIPATED IN THE ATV SAFETY PROGRAM.

11. DOES YOUR FAMILY RIDE AN ATV REGULARLY?

- |        |                              |                             |
|--------|------------------------------|-----------------------------|
| YOU:   | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| CHILD: | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

12. HOW MANY DIFFERENT ATV'S DOES YOUR FAMILY OPERATE REGULARLY? \_\_\_\_

PLEASE DESCRIBE THEM:

	ATV#1	ATV#2	ATV#3	ATV#4
engine	____cc	____cc	____cc	____cc
# wheels	____	____	____	____
Who rides it often?	____	____	____	____

13. HOW LONG HAS YOUR FAMILY BEEN RIDING?

YOU	____	YEARS	____	MONTHS
CHILD	____	YEARS	____	MONTHS

14. IN THE PAST YEAR, HOW OFTEN DID YOUR FAMILY RIDE AN ATV?

YOU		CHILD
____	DAILY	____
____	WEEKLY	____
____	MONTHLY	____
____	SEVERAL TIMES A YEAR	____
____	NEVER	____

15. WHAT PERCENTAGE OF THE TIME IS YOUR ATV USED FOR EACH OF THE FOLLOWING PURPOSES? (Please be sure percentages add up to 100%!)  
 WORK \_\_\_\_\_%  
 RECREATION \_\_\_\_\_%  
 OTHER \_\_\_\_\_% (describe)

16. HOW OFTEN DOES YOUR FAMILY WEAR A HELMET WHEN RIDING AN ATV?

YOU		CHILD
____	ALWAYS	____
____	USUALLY	____
____	SOMETIMES	____
____	NEVER	____

17. HOW OFTEN DOES YOUR FAMILY CARRY A PASSENGER WHEN RIDING AN ATV?

YOU		CHILD
____	ALWAYS	____
____	USUALLY	____
____	SOMETIMES	____
____	NEVER	____

18. HOW OFTEN DOES YOUR FAMILY OPERATE AN ATV ON PAVEMENT, OTHER THAN SIMPLY CROSSING A WALK OR DRIVE?

YOU		CHILD
____	ALWAYS	____
____	USUALLY	____
____	SOMETIMES	____
____	NEVER	____

19. HOW OFTEN DOES YOUR FAMILY OPERATE YOUR ATV ON OR ALONG SIDE THE ROAD?

YOU		CHILD
____	ALWAYS	____
____	USUALLY	____
____	SOMETIMES	____
____	NEVER	____

20. HOW DID THE CHILD WHO PARTICIPATED IN THE ATV SAFETY PROGRAM COME TO DO SO?

THROUGH:

- ☐ 4-H MEMBERSHIP
- ☐ SCHOOL ( ☐ 4-H ☐ OTHER)
- ☐ PARENTAL DIRECTION
- ☐ CAMP ( ☐ 4-H ☐ OTHER)
- ☐ CHILD'S INTEREST
- ☐ OTHER \_\_\_\_\_

21. HOW OFTEN DOES THIS CHILD PARTICIPATE IN 4-H ACTIVITIES/ EDUCATIONAL EXPERIENCES?

- ☐ DAILY  
☐ WEEKLY  
☐ MONTHLY  
☐ SEVERAL TIMES A YEAR  
☐ NEVER

IS THE CHILD A MEMBER OF 4-H?

- ☐ YES ☐ NO

22. IN THE PAST YEAR, HAVE YOU OR ANY MEMBER OF YOUR FAMILY HAD ANY ATV-RELATED ACCIDENTS THAT REQUIRED THAT PERSON OR SOMEONE ELSE INVOLVED TO RECEIVE EMERGENCY MEDICAL ATTENTION?

- ☐ YES ☐ NO

IF YES, PLEASE DESCRIBE.

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23. DID THIS CHILD TALK WITH YOU ABOUT ATV SAFETY AFTER ATTENDING THE ATV SAFETY PROGRAM?

- ☐ YES ☐ NO

IF YES, WHAT DID YOU TALK ABOUT?

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24. WHAT CHANGES, IF ANY, HAVE YOU NOTICED IN HOW THE CHILD OPERATES AN ATV SINCE ATTENDING THE ATV SAFETY PROGRAM?

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25. WHAT ROLE DO YOU THINK ADULTS SHOULD PLAY IN PROMOTING ATV SAFETY WITH THE CHILDREN THEY ARE RESPONSIBLE FOR?

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26. WHAT ROLE DO YOU THINK ADULTS SHOULD PLAY IN PROMOTING GENERAL SAFETY WITH CHILDREN?

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27. HOW DO YOU ADDRESS SAFE ATV OPERATION WITH THE CHILDREN YOU ARE RESPONSIBLE FOR?

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28. HOW DO YOU ADDRESS GENERAL SAFETY WITH CHILDREN?

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29. WHAT DO YOU THINK ARE THE MOST SERIOUS RISKS IN OPERATING AN ATV?

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30. HOW EFFECTIVE DO YOU BELIEVE THE ATV SAFETY PROGRAM WAS IN POSITIVELY CHANGING THIS CHILD'S BEHAVIOR ON ATV's?

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31. HOW MUCH EFFECT DID THE PROGRAM HAVE ON YOU?

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32. SAFETY INFORMATION COMES FROM A VARIETY OF SOURCES. PLEASE LOOK OVER THE FOLLOWING LIST OF SOURCES OF SAFETY INFORMATION. RANK THEM BY HOW CREDIBLE/DEPENDABLE YOU BELIEVE THEM TO BE IN PROVIDING SAFETY INFORMATION.

(1=most credible/dependable, 2=second most...)

- ☐ FORMAL EDUCATION
- ☐ YOUTH SERVING ORGANIZATIONS
- ☐ MANUFACTURERS
- ☐ DEALERS/POINT OF SALE
- ☐ INTEREST GROUPS/CLUBS
- ☐ CONSUMER ORGANIZATIONS
- ☐ GOVERNMENT ORGANIZATIONS
- ☐ OTHER (please describe)

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33. INFORMATION IS PRESENTED TO US IN MANY DIFFERENT WAYS. AND, PEOPLE HAVE DIFFERENT PREFERENCES FOR RECEIVING INFORMATION. CONSIDERING ATV SAFETY, PLEASE LOOK OVER THE FOLLOWING LIST OF WAYS TO RECEIVE INFORMATION AND RANK EACH OF THEM.

(1=first preference, 2=second...)

- ☐ PAMPHLETS OR BOOKLETS
- ☐ NEWSPAPERS OR MAGAZINE ARTICLES
- ☐ AUDIO CASSETTE TAPES
- ☐ VIDEO TAPES
- ☐ TELEVISION PROGRAMS
- ☐ LEARN-BY-MAIL PROGRAMS
- ☐ FORMAL REPORTS
- ☐ GROUP MEETINGS
- ☐ 800 TELEPHONE NUMBER
- ☐ OTHER (please describe)

34. WHAT WOULD BE THE BEST THING WE COULD DO TO FURTHER ASSIST YOU IN ADDRESSING SAFE ATV OPERATION?

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35. ADDITIONAL COMMENTS?

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Recently a survey was mailed to you concerning the 4-H Community ATV Safety Program. The survey is being used to determine the effectiveness of this program.

If you have already completed and returned the survey, please accept our thanks. If not, please fill in and return the survey to us today. It is very important that we be able to include your comments in our evaluation of the program. We want to hear from all program participants!

If by some chance you did not receive the survey or it has been misplaced, please give me a call at (703) 552-6733. I'll get another copy out to you as soon as possible.

Yours truly,



Susan W. Halbert  
National Coordinator  
4-H Community ATV Safety Program



TBS 5505 (9210)

4-H COMMUNITY ATV SAFETY PROGRAM EVALUATION  
KID'S PHONE SURVEY

RECORD # \_\_\_\_\_  
DATE \_\_\_\_\_ INTERVIEWER \_\_\_\_\_

RESPONDENT \_\_\_\_\_ PHONE # (\_\_\_\_) \_\_\_\_\_

STATE \_\_\_\_\_ BIRTHDATE \_\_\_\_\_

HELLO MY NAME IS... & I'M CALLING FROM THE 4-H COUNCIL  
TO ASK ABOUT AN ATV SAFETY COURSE YOU ATTENDED. WE'RE EVALUATING  
THE EFFECTIVENESS OF THIS COURSE AND WE WOULD REALLY APPRECIATE  
YOUR HELP. DO YOU HAVE A FEW MINUTES TO ANSWER SOME QUESTIONS?

RIDE REGULARLY? \_\_\_\_ YES \_\_\_\_ NO IF 'NO' ASK: 'HAVE YOU EVER RIDDEN  
AN ATV?' IF KID HAS  
NEVER RIDDEN OR ONLY  
BEEN ON ONCE THEN END  
SURVEY.

3-WHEEL \_\_\_\_ 4-WHEEL \_\_\_\_ BOTH \_\_\_\_ OTHER(2-WH OR 5-WH) \_\_\_\_

HOW LONG? \_\_\_\_  
YEARS MONTHS

HOW OFTEN? \_\_\_\_ DAILY \_\_\_\_ WEEKLY \_\_\_\_ MONTHLY  
\_\_\_\_ SEVERAL TIMES A YEAR

HOW OFTEN DO YOU WEAR A HELMET WHEN RIDING?

\_\_\_\_ ALWAYS \_\_\_\_ USUALLY \_\_\_\_ SOMETIMES \_\_\_\_ NEVER

HOW OFTEN DO YOU CARRY A PASSENGER WHEN OPERATING AN ATV?

\_\_\_\_ ALWAYS \_\_\_\_ USUALLY \_\_\_\_ SOMETIMES \_\_\_\_ NEVER

HOW OFTEN ARE YOU THE PASSENGER WHEN YOU RIDE AN ATV?

\_\_\_\_ ALWAYS \_\_\_\_ USUALLY \_\_\_\_ SOMETIMES \_\_\_\_ NEVER

HOW OFTEN DO YOU OPERATE YOUR ATV ON PAVEMENT OTHER THAN SIMPLY  
CROSSING A WALK OR DRIVE?

\_\_\_\_ ALWAYS \_\_\_\_ USUALLY \_\_\_\_ SOMETIMES \_\_\_\_ NEVER

HOW OFTEN DO YOU OPERATE YOUR ATV ALONGSIDE THE ROAD?

\_\_\_\_ ALWAYS \_\_\_\_ USUALLY \_\_\_\_ SOMETIMES \_\_\_\_ NEVER

OPQU1: SINCE YOU HAVE TAKEN THE COURSE, HAS THERE BEEN A TIME WHERE YOU MIGHT HAVE BEEN HURT ON AN ATV, BUT WERE NOT BECAUSE SOMETHING YOU LEARNED THERE?

OPQU2: CAN YOU THINK OF A SPECIFIC TIME WHEN YOU DIDN'T GET HURT BECAUSE YOU WERE WEARING A HELMET?

OPQU3: A) DID YOU TELL YOUR FRIENDS OR FAMILY MEMBERS ABOUT THE NEED TO WEAR HELMETS? \_\_\_\_ Y \_\_\_\_ N

HOW DID THEY RESPOND? (\*PROMPT: WHAT DID THEY DO OR SAY? OR WAS IT POSITIVE?)

B) DID YOU TELL THEM ABOUT NOT RIDING DOUBLE ON AN ATV?  
\_\_\_\_ Y \_\_\_\_ N HOW DID THEY RESPOND? (SAME PROMPT AS ABOVE)

OPQU4: CAN YOU THINK OF ANYTHING YOU DO DIFFERENTLY SINCE YOU WENT TO THE COURSE? (IF THEY SAY THEY HAVEN'T RIDDEN SINCE COURSE, ASK IF THEY WOULD DO ANYTHING DIFFERENTLY)  
(\*PROMPT: IS THERE ANYTHING YOU USED TO DO THAT YOU DON'T DO NOW?)

OPQU5: BECAUSE YOU LEARNED ABOUT THE DANGERS OF ATV'S AT THE COURSE, DO YOU THINK OF THE DANGERS IN OTHER ACTIVITIES THAT YOU DO?





1022715159



Information Provided by:  
U.S. Consumer Product Safety Commission



This program is a partnership of the 4-H Youth Development Program of the Cooperative Extension System and U.S. Department of Agriculture, American Honda Motor Company, Inc. and National 4-H Council. 4-H is the youth education program of the Cooperative Extension Service of the state land-grant universities and the U.S. Department of Agriculture. Program and educational materials of National 4-H Council are available to all persons regardless of race, color, sex, age, religion, national origin or handicap. Council is an equal opportunity employer.